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September 13, 2017 12:00 ET

HURRICANE HARVEY MANAGEMENT REPORT

Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources. The Senior Leadership Briefing and DHS Component Actions Reports are attached.

National Incident Management Objectives

- Objective 1: Ensure that health and safety of the EPA response is considered at all times.
- Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3: Ensure prompt Review and Processing of Fuel Waiver requests.
- Objective 4: Prepare for and provide Rapid Assessment of Industrial facilities as requested by the State or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with our state partners, contact industrial sources within the impacted area to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources.
- Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support our state partners in contacting drinking water and waste water systems.
- Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8: Encourage a collaborative federalism approach, where national, state and local governments interact cooperatively and collectively to solve common problems.
- Objective 9: Begin Agency internal and external coordination, under the National Disaster Recovery Framework, regarding Recovery Support Functions in which EPA is likely to be involved.

Executive Summary

- On September 7th, EPA sent an Information Request to Arkema Inc. to determine if they complied with Section 114 of the Clean Air Act. On September 12th, the Washington Examiner published an interview with the EPA Administrator discussing details of the inquiry.
- EPA Region 6 (R6) Environmental Justice Director will visit the Alabama-Coushatta tribe on September 13th.
- Community Liaisons continue to assist impacted counties by providing information to residents on dealing with the environmental hazards of returning to flood damaged homes and obtaining their input about other challenges or concerns.
- EPA and the Texas Commission on Environmental Quality (TCEQ) met with environmental advocates in Austin on September 12th.
- EPA supported the Texas Water Development Board's requests for flexibility in using State Revolving Loan Funds to address hurricane damage and is committed to expedited reviews.
- EPA expects to complete sampling of the 34 Superfund sites in Texas potentially impacted by the storm by September 13th and have preliminary results by September 16th.
- EPA expects to complete sampling of the nine Superfund sites in Louisiana potentially impacted by the storm by September 15th and have preliminary results by September 18th.
- Discussions at the Joint Field Office (JFO) are now focusing on debris management operations. EPA is providing a debris management expert to the JFO at FEMA's request.
- Airborne Spectral Photometric Environmental Collection Technology (ASPECT) completed flight operations for the Hurricane Harvey response and demobilized. ASPECT surveyed a total of 134 Risk Management Program (RMP), 456 drinking water, and 105 waste water facilities.

Region 6 Significant Activities:

The R6 Region Emergency Operations Center (REOC) is currently activated and working under a limited Emergency Support Function (ESF) 10 FEMA Mission Assignment (MA). EPA has received MAs for over \$10.3 million for recovery operations to include assisting TX with drinking water, wastewater, and hazmat recovery operations. FEMA announced plans to fund mission assignments in five day increments.

| Mission Assignment Number | Funding Amount | Description of Assignment |
|----------------------------------|-----------------------|--|
| MA4332DRTX3 | \$10,092,000 | R6 Field Ops incl. assessing drinking & waste water infrastructure, implementation of Response Manager tracking system, response to hazardous substance releases and oil discharges. |
| MA4332DRTX1 | \$275,000 | Deployment of EPA to various locations, including but not limited to TX EOC and the FEMA RRCC to support response operations. |
| Total Funds | \$10,367,000 | |

Number of R6 Personnel Involved:

| Personnel | EPA R6 Dallas | FEMA Denton | Texas JFO Austin | TX SOC Austin | TCEQ Austin | Houston | Corpus Christi | Beaumont/Port Arthur | Totals |
|-------------------------|----------------------|--------------------|-------------------------|----------------------|--------------------|----------------|-----------------------|-----------------------------|---------------|
| R6 | 55 | 0 | 1 | 2 | 0 | 74 | 13 | 8 | 153 |
| START | 9 | 0 | 0 | 1 | 1 | 12 | 12 | 9 | 44 |
| ERRS | 0 | 0 | 0 | 0 | 0 | 19 | 6 | 5 | 30 |
| Other Contractor | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL | 65 | 0 | 1 | 3 | 1 | 105 | 31 | 22 | 228 |

Debris Recovery Operations:

EPA's representative at the JFO indicated that the state is currently assessing its capacity to manage debris collections and disposal. While R6 does not expect to receive a direct mission assignment for this work, they are planning to place field observers in Corpus Christi and Houston to ensure that debris is properly categorized for disposal.

Container Recovery Operations:

This chart includes daily and cumulative data on container recovery.

| Date | Containers | | | | Total |
|----------------------|---------------|---------------------------|---------------------------|-----------|------------|
| | Drums (55gal) | Small Containers (<55gal) | Large Containers (>55gal) | Cylinders | |
| 9/11/2017 | 10 | 24 | 3 | 6 | 43 |
| 9/12/2017 | 33 | 30 | 4 | 12 | 79 |
| Total to Date | 127 | 110 | 15 | 45 | 297 |

Houston, TX:

On September 12th, EPA received a report from PCI Nitrogen (formerly Agrifos) in Pasadena that storm water run-off from Hurricane Harvey had caused a section of a retaining wall on the plant grounds to collapse. An Assessment Team will investigate the report on September 13th.

Beaumont, TX:

The Inland Task Force Hazard Evaluation Teams, Orphan Container Recovery Group and Oil Discharge Task Force conducted hazard assessments in Lumberton, Sour Lake, Port Arthur, Nederland, Sabine Pass, Beaumont, Bridge City, Beaumont Yacht Club, and Rose City. Orphan Container Recovery Teams identified targets in Port Arthur, South Orange, Lumberton, Bridge City, and Grove.

Corpus Christi, TX:

An Oil Discharge Assessment team monitored Signet Enterprise salvage operations. Oil Discharge Removal Teams coordinated and monitored responsible party clean-ups and prioritized threats to the environment for removal in Laguna Madre, Padre Island Canals, Flour Bluff Canals, White Cap, Corpus Christi Bay, Ingleside, Nueces Bay, Mustard Island, the city of Corpus Christi, Copano Bay, Lamar Peninsula, Rattlesnake Point, and Holiday Beach.

Emergency Response:

R6 continues to collect and stage recovered orphan containers. They anticipate completion in Corpus Christi, Houston, and Beaumont over the next 30 days.

| Daily/Cumulative Summary of Hazard Evaluations/Recovery | | | | |
|---|------------------|---|------------------|-------------------|
| Status | Opened | | Closed | |
| | 9/12/2017 | Number of Targets Remaining Open | 9/12/2017 | Cumulative |
| Corpus Christi Branch | 2 | 6 | 10 | 96 |
| Houston Branch | 17 | 145 | 73 | 132 |
| Port Arthur/Beaumont Branch | 32 | 44 | 42 | 48 |
| NRC Reports | 0 | 1 | 1 | 2 |
| TOTALS | 51 | 196 | 126 | 278 |
| Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item. | | | | |

| Daily/Cumulative Summary of Spills/Discharges (Non-vessels) | | | | |
|--|----------------|---|----------------|-------------------|
| Status | Opened | | Closed | |
| | 9/12/17 | Number of Facilities/Spills Remaining Open | 9/12/17 | Cumulative |
| Corpus Christi Branch | 2 | 2 | 1 | 32 |
| Houston Branch | 0 | 29 | 2 | 41 |
| Port Arthur/Beaumont Branch | 1 | 8 | 2 | 12 |
| NRC Reports | 5 | 59 | 14 | 52 |
| TOTALS | 8 | 98 | 19 | 137 |
| Note: Open means the target is yet to be recovered/cleaned up. Closed means the target was recovered/cleaned up by a Responsible Party or not found upon return to location. * The number of targets remaining opened has changed as QA/QC efforts have taken place and due to corrections made to the coding. Previous amounts were the total number of targets opened overall, not just those remaining open. | | | | |

FIELD RESPONSE ACTIVITIES

| Field Teams on 9/12/2017 | | | | |
|---|--------------|--------------|----------------|--------------|
| <u>Teams</u> | Alpha | Bravo | Charlie | TOTAL |
| Hazard Evaluation | 2 | 1 | 3 | 6 |
| Oil Discharge Assessment | 2 | 4 | 1 | 7 |
| ER/Orphan Container Recovery | 1 | 9 | 2 | 12 |
| Oil/Vessel Recovery | 5 | 2 | 0 | 7 |
| Staging Areas | 1 | 1 | 1 | 3 |
| Air Operations | 0 | 1 | 1 | 2 |
| Air Monitoring | 0 | 3 | 0 | 3 |
| Water Infrastructure Assessment – Drinking Water | 0 | 8 | 1 | 9 |
| Water Infrastructure Assessment – Wastewater | 0 | 6 | 0 | 6 |
| Total | 11 | 35 | 9 | 55 |

EPA Headquarters Significant Activities:

The HQ EOC is activated to Level 1 in support of the Region 6 response to Harvey. The HQ EOC is coordinating with Region 6 and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF-10 desk. EPA Senior Management that comprise the Policy Coordinating Committee (PCC) developed and issued senior management objectives that form the basis of field strategy and tactics in response to Harvey.

Headquarters Mission Assignments:

| Mission Assignment Number | Funding Amount | Description of Assignment |
|----------------------------------|-----------------------|----------------------------------|
| MA4332DRTX1 | \$10,000 | FEMA HQ ESF-10 Desk Support |
| 4332DRTXEPA02 | \$40,000 | FEMA HQ ESF-10 Desk Support |
| Total Funds | \$50,000 | |

Number of HQ Personnel Involved in the EOC:

| Personnel | AO | OAR | OCFO | OCSPP | OECA | OEI | OGC | OLEM | OP | ORD | OW | ATSDR | Totals |
|--------------|----|-----|------|-------|------|-----|-----|------|----|-----|----|-------|-----------|
| Employees | 1 | 0 | 0 | 0 | 3 | 1 | 1 | 15 | 1 | 1 | 1 | 1 | 25 |
| Contractors | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 7 |
| TOTAL | 1 | 0 | 0 | 0 | 3 | 5 | 1 | 18 | 1 | 1 | 1 | 1 | 32 |

Superfund NPL Sites:

EPA provided oversight to potentially responsible parties (PRPs) and independently started collecting samples at 34 TX Superfund Sites and nine LA Sites to confirm no releases due to storm impacts. EPA teams, along with PRPs, completed sampling at 26 sites. R6 expects sampling in TX to be complete by September 13th and sampling in LA to be complete by September 15th. R6 also expects to have preliminary results for sites located in TX by September 16th and for the sites located in LA by September 18th.

All 43 Federal Superfund NPL Sites in the affected area have been assessed. Of these, 41 sites have been cleared, and two sites (San Jacinto Pits and US Oil) require additional follow-up.

- San Jacinto Waste Pits: Cap repairs continue on the remaining berm sections and samples were collected and sent for analyses. The Dive team assessed the armor cap and identified missing components. R6 is developing a sampling plan based on this assessment.
- US Oil: The PRP continues pump-down operations to maintain freeboard. Since the time the pump-down operations began, the PRP has removed approximately 290,000 gallons of storm water from the site. They are also removing sludge globules observed on the ground surface.

EPA Laboratory/Analytical Services:

Nothing significant to report.

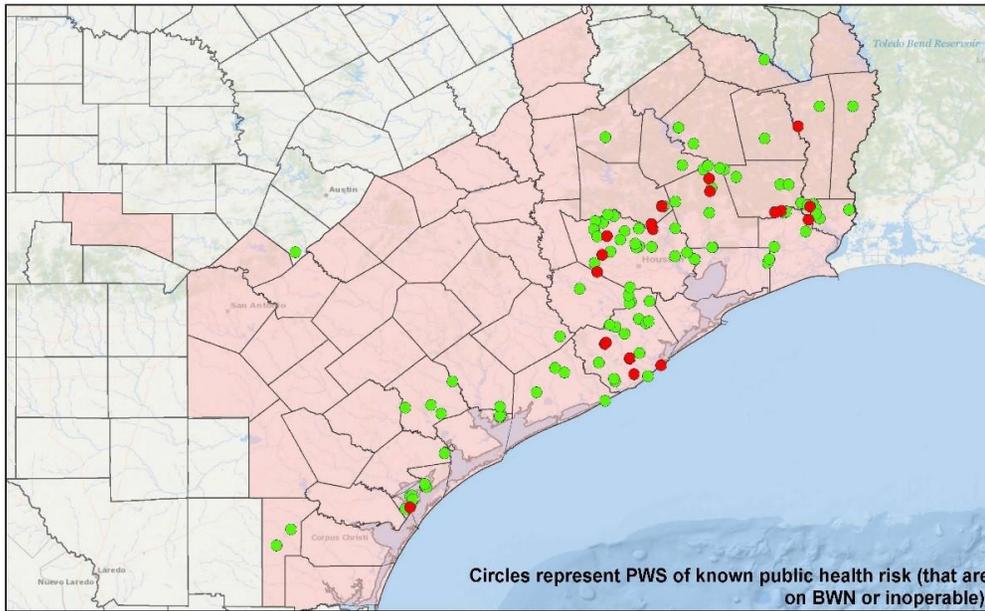
Air Monitoring

The Trace Atmospheric Gas Analyzer (TAGA) mobile laboratory and air quality technical specialists monitored the neighborhoods adjacent to two industrial sources along Buffalo Bayou near Pasadena. TAGA terminated monitoring early due to unfavorable wind conditions. On September 13th, TAGA will finish monitoring neighborhoods around four industrial sources in Galena Park.

Drinking Water/Wastewater Assessments:

EPA continues to support to TCEQ for drinking water and wastewater system assessments.

| Drinking Water and Waste Water Assessments (September 12 th) | | |
|--|-------------------|-------------------|
| Assessment Types | Daily Assessments | Total Assessments |
| On-Site DW Assessments | 73 | 518 |
| On-Site WW Assessments | 34 | 347 |
| Phone DW Assessments | 145 | 6237 |
| Phone WW Assessments | 126 | 4571 |



Legend

- Water Outage
- Boiled Water Notice
- State Declared Counties

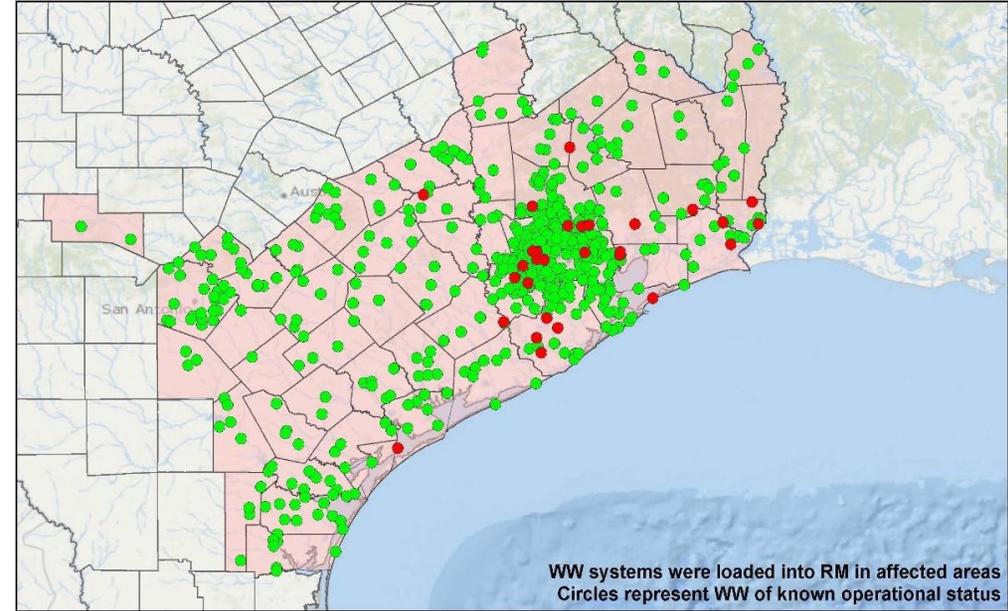
US EPA Region 6
Hurricane Harvey Response

Drinking Water Status Map in Hurricane Harvey Affected Areas
0600 CDT 20170913

0 25 50 Miles
For Official Use Only
Printed via Web

EPA GIS
Printed: 10:56:03 PM 9/12/2017

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Legend

- Not Operational
- Operational
- State Declared Counties

US EPA Region 6
Hurricane Harvey Response

Wastewater Status Map in Hurricane Harvey Declared Areas
0600 CDT 20170913

0 25 50 Miles
For Official Use Only
Printed via Web

EPA GIS
Printed: 10:42:03 PM 9/12/2017

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Other EPA Activities

Fuel Waivers:

| Affected State | Waiver Request | Date Received | Status Talking Point | Waiver Response |
|---|--|---------------|---|---|
| Reid Vapor Pressure Requirements Waivers | | | | |
| TX | Letter from TCEQ requesting a waiver of the RVP, RFG and TxLED standards in the Governor's Disaster Proclamation | 8/25/17 | Granted on 8/25/17 | https://www.epa.gov/enforcement/eastern-and-coastal-texas-fuels-waiver |
| GA | Amended letter from GA Department of Natural Resources for Atlanta RVP to waive 7.8 RVP requirement to 11.5 RVP | 8/29/17 | Granted on 8/29/17 | https://www.epa.gov/enforcement/louisiana-fuels-waiver |
| LA | Letter from LA governor requesting a waiver of the low RVP requirements. | 8/28/17 | Granted on 8/28/17 | https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf |
| AR | The state is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel. | 8/31/17 | N/A | N/A |
| OK | A statewide low RVP fuel waiver request was submitted and then the request was amended. | 8/28/17 | 8/30/17 | https://www.epa.gov/enforcement/second-multi-state-fuels-waivers |
| Dyed NRLM Diesel Fuel Waiver | | | | |
| TX | Letter from TX comptroller requesting a waiver of using dyed NRLM diesel fuel in motor vehicles. | 8/29/17 | Granted on 8/29/17; IRS expanded to cover all of TX on 9/3/17 | https://www.epa.gov/enforcement/texas-diesel-waiver |

| Affected State | Waiver Request | Date Received | Status Talking Point | Waiver Response |
|---|---|---------------|--|---|
| Florida | Florida Department of Environmental Protection requests use of 15 parts per million sulfur non-road diesel to be used as highway diesel fuel, waiving red dye requirements | 9/6/17 | Granted 9/6/17 through 9/22/17 | URL pending |
| Low Volatility Conventional Gasoline and Reformulated Gasoline (RFG) | | | | |
| CT, ME, MA, NH, RH, VT, DE, DC, MD, NJ, NY, and PA, FL, GA, NC, SC, VA, and WV; all mid-western states located in *PADD 2 - IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, SD, OH, OK, TN, and WI; and all Gulf coast states located in PADD 3 –AL, AR, LA, MS, NM, and TX | Issuance of waivers based on requests for the allowance of regulated parties within the listed states to produce, sell, or distribute conventional winter gasoline (including BOBs) with an RVP of 11.5 psi before the addition of any ethanol in any RFG covered area. The waiver for El Paso goes until September 16 th due to their State Implementation Plan requirements. | 8/30/17 | Granted on 8/31/17 Extended to 9/26/17. | https://www.epa.gov/enforcement/second-multi-state-fuels-waivers |

***PADD: Petroleum Administration for Defense Districts**

Communications:

The Crisis Communication Plan remains activated. EOC PIO continues to work on developing fact sheets on issues regarding the recovery including how to handle household hazardous waste and other debris. R6 PIO and Data Management created a *Region 6 Hurricane Harvey - Public Story Map*. The map is located at this link: <https://epa.maps.arcgis.com/apps/MapJournal/index.html?appid=fadbae6b2832436fb65ca497bd75b9a6>

Community Liaisons (CLs) continue touching base with residents in each of the 39 declared counties and providing information for use in the recovery process.